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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/709,233

04/22/2004

Edward Willis

3232

36731

7590

09/12/2006

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EXAMINER

RADI, JOHN A

ART UNIT

PAPER NUMBER

3641

DATE MAILED: 09/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/709,233	WILLIS, EDWARD	
	Examiner	Art Unit	
	John A. Radi	3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-17 is/are pending in the application.
- 4a) Of the above claim(s) 1 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection, necessitated by amendment and introduction of all new claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshima (US 6676079) in view of Kaura (US 6571677) further in view of Boock (US 6065717).

Takeshima teaches an anti-hijacking cockpit shield for an aircraft (1) having a fuselage housing (20) within which are defined a cockpit (fig 2) and passenger compartments (fig 3), comprising: a stationary dividing wall configured to completely isolate the cockpit from the passenger compartment (figure 1 and 2), the dividing wall comprising a metallic sheet (col 3 line 14 – duraluminum).

Takeshima doesn't teach adhering a ballistic resistant material in addition to the duraluminum bulkhead. Kaura teaches a ballistic protective laminate

Art Unit: 3641

made of Kevlar™ (col 1 line 45) and titanium (col 2 line 15) for use in cockpit doors or partitions (col 2 lines 28-31). The motivation for combining them can be found in Kaura and Takeshima, to make a partition which is ballistic resistant and would protect the cockpit from possible hijackers. Therefore it would have been obvious to one skilled in the art at the time of invention to combine Takeshima and Kaura to create a partition laminated with ballistic materials to protect the cockpit against invasion.

Furthermore, Takeshima doesn't teach the use of metallic studs mounted to the fuselage for installation of the divider wall. Boock teaches a means for mounting wall panels directly to the fuselage through the use of studs (col 2 lines 34-36), the purpose being to minimize vibration and noise into the cabin.

Furthermore, the choice of metal as a structural material for the stud is also within the general skill of a worker in the art, as selecting a known material on the basis of its suitability for the intended use is merely a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to take the bulkhead panel taught by Takeshima/Kaura and mount it to the fuselage by way of a metal stud.

With respect to claim 3, 4, 14 and 15, Kaura teaches a plurality of sheets attached to one another (fig 4a, and configurations 1 and 2).

With respect to claim 5, Kaura teaches a ballistic material (Kevlar™ - col 1 line 50) which is part of the laminate structure.

Art Unit: 3641

With respect to claim 6, 11 and 12, Boock teaches the mounting of wall panels by way of rivets and studs (col 2 lines 34-36).

With respect to claim 7 and 8, Kaura teaches the selection of titanium for the wall panels (configuration 2), it would have been obvious to one having ordinary skill in the art at the time of invention to select titanium as the material for the wall stud as well, for ease of manufacturing.

With respect to claim 9, 10, 16 and 17, Kaura teaches the ballistic layer being adhesive bonded (abstract, laminated), wherein the material is either woven (fig 5 and 6) or non-woven material (fig 1 and 2).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 3641

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Radi whose telephone number is 571-272-5883. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John A Radi
Patent Examiner
Art Unit 3641



Michael J Carone
Supervisory Patent Examiner
Art Unit 3641